

MEDIUM VOLTAGE PRODUCTS

BDG 072Ax, BDG 072B3 Indoor current transformer



Technical parameters	Value
Highest voltage for equipment	0.72 kV
Power frequency voltage, 1 min.	3 kV
Rated primary current	2 000 - 57 000 A
Rated short-time thermal current	63 (3s) – 210 (3s) kA
Rated dynamic current	190 - 575 kA
Reconnectable	secondary

Description

The indoor current transformer type BDG without primary conductor is designed for installation in generator circuit-breakers systems.

The BDG current transformers are reconnectable on the secondary side. The maximum number of secondary windings is 3 with a maximum 12 secondary terminals without the possibility of direct grounding. Thus the connection of each secondary to ground requires separate leads (not part of delivery). There are more details about BDG current transformer installation in a separate manual available upon request.

The secondary windings are designed for metering or protection purposes. One terminal of each used secondary winding and one terminal of each unused winding have to be earthed during the transformer operation (unused short-circuited also). The terminals allow M4 connection. The transformer can be mounted in any position and it is fixed by four M16 bolts.

Technical data

The transformers are designed and manufactured in conformity with the following standards:

- IEC 61869-1; IEC 61869-2;
- IEC 60044-1;
- GOST 7746-2001: Current transformers (*).

(*) Aplicable for BDG 072A1, BDG 072A2 and BDG 072A3 only

The transformer can be installed by authorized personnel only and needs to comply with instructions for installation, use and maintenance.

Standardized insulation level of BDG transformers

Standard insulation level: 0.72 / 3 / - kV
Code designation – BDG current transformers
BDG 072A0 – multi core design body up to 12 000 A
BDG 072A1 – multi core design body up to 18 000 A
BDG 072A2 – multi core design body up to 23 000 A
BDG 072A3 – multi core design body up to 57 000 A
BDG 072B3 – multi core design body up to 57 000 A

BDG	072	Туре	X diameter
	Voltage		dimension
		Α	0inner diameter 700 mm
		Α	1inner diameter 870 mm
		Α	2inner diameter 940 mm
		Α	3inner diameter 1 260 mm
		В	3inner diameter 1 275 mm

Types		BDG 072A0	BDG 072A1	BDG 072A2	BDG 072A3	BDG 072B3
Rated voltage		Up to 0.72				
Rated primary current max.	[A]	12 000	18 000	23 000	57 000	57 000
Rated primary current min.	[A]	2 000	2 000	3 000	4 000	4 000
Rated frequency	[Hz]	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Rated secondary current	[A]	1 or 5				
Rated burden max. (per core)	[VA]	200	200	200	200	200
Rated acc. Class best IEC		0.1	0.1	0.1	0.1	0.1
Rated acc. Class best ANSI		0.3	0.3	0.3	0.3	0.3
Number of cores per frame max.		3	3	3	3	3
Protection class IEC		5P or 10P				
Ambient temperature categories	[°C]	-45+80	-45+80	-45+80	-45+80	-45+80
Temperature for transport	[°C]	-50+80	-50+80	-50+80	-50+80	-50+80
Power frequency withstand voltage	[kV]	3	3	3	3	3
Ith rated short-time current	[kA/3s]	63	130	130	210	210
Idyn dynamic withstand current	[kA]	190	360	360	575	575

01 Examples of secondary terminal marking

Marking of current transformer outlets





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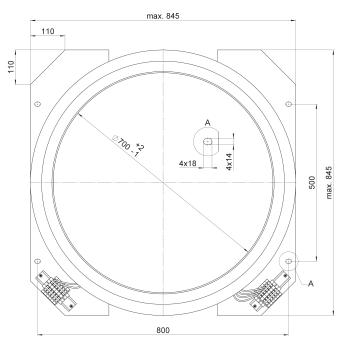
Dimensional Drawings

BDG 072Ax, BDG 072 B3

BDG 072A0

Weight of the transformer depends on the number of cores and their parameters 25 - 100 kg.

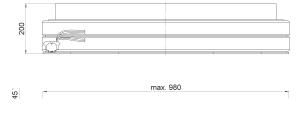


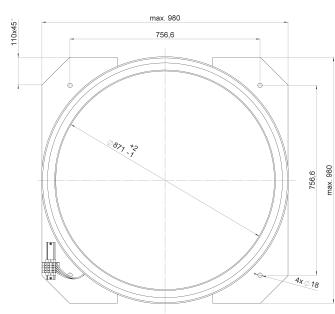


Drawing no.	Polarity
1VL4600939R0101	P1-P2
1VL4600939R0102	P2-P1

BDG 072A1

Weight of the transformer depends on the number of cores and their parameters $30 - 120 \ kg$.



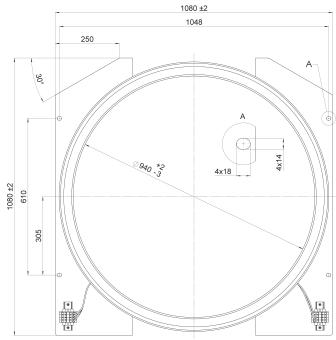


Drawing no.		Polarity		
	1VL4600822R0101	P1-P2		
	1VL4600822R0102	P2-P1		

BDG 072A2

Weight of the transformer depends on the number of cores and their parameters 40 - 145 kg.



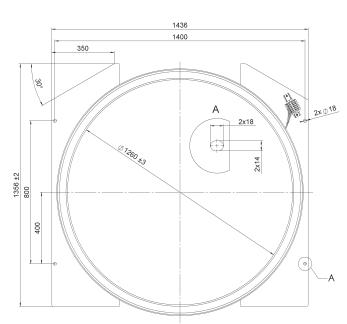


Drawing no.	Polarity
1VL4600939R0101	P1-P2
1VL4600939R0102	P2-P1

BDG 072A3

Weight of the transformer depends on the number of cores and their parameters 50 - 205 kg.

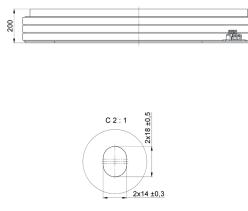


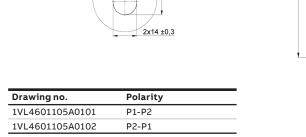


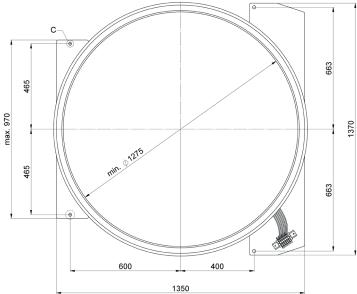
Drawing no.	Polarity	
1VL4600824R0101	P1-P2	
1VL4600824R0102	P2-P1	

BDG 072B3

Weight of the transformer depends on the number of cores and their parameters 50-210 kg.









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